

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

IN THE MATTER OF:

Anaconda /Yerington Mine Site
Yerington, Lyon County,
Nevada

Atlantic Richfield Company,

Respondent

ADMINISTRATIVE ORDER FOR
REMEDIAL INVESTIGATION AND
FEASIBILITY STUDY

U.S. EPA Region
CERCLA
Docket No. 9-2007-0005

Proceeding Under Section 106(a) of the
Comprehensive Environmental Response,
Compensation, and Liability Act, as
amended, 42 U.S.C. § 9606(a)

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ATTACHMENTS

Attachment 1 Statement of Work

Attachment 2 Map showing location of the Site

1

2 I. INTRODUCTION AND JURISDICTION

3 1. This Order directs Atlantic Richfield Company, ("Respondent") to conduct a Remedial
4 Investigation ("RI") and Feasibility Study ("FS") for hazardous substances, pollutants and
5 contaminants in and adjacent to the former copper mine located at 103 Birch Drive near
6 Yerington, in Lyon County, Nevada, including portions of Township 13N, Range 25E, Sections 4,
7 5, 8, 9, 16, 17, 20, and 21 (Mount Diablo Baseline and Meridian) on the Mason Valley and
8 Yerington United States Geologic Survey 7.5 minute quadrangles (the "Anacaonda /Yerington
9 Mine Site" or the "Site"). Pursuant to this Order, Respondent will conduct the Work described
10 herein to investigate an imminent and substantial endangerment to human health or the
11 environment that may be presented by the actual or threatened release of hazardous substances,
12 pollutants, contaminants or solid wastes at or from the Site, and to provide an FS for potential
13 response actions.

14 2. This Order is issued to Respondent by the United States Environmental Protection
15 Agency, Region 9 ("EPA") pursuant to the authority vested in the President of the United States
16 by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability
17 Act of 1980, as amended, ("CERCLA"), 42 U.S.C. § 9606(a), and delegated to the EPA
18 Administrator by Executive Order No. 12580, January 23, 1987, 52 *Fed. Reg.* 2923, as amended
19 by Executive Order No. 13016, August 30, 1996, 61 *Fed. Reg.* 45,871, further delegated to the
20 EPA Regional Administrators by EPA Delegation No. 14-B and further delegated to the
21 Superfund Branch Chief by Regional Delegation 1290.14A, dated November 16, 2001.

22 3. In issuing this Order, EPA's objectives are to: (a) determine the nature and extent of
23 contamination and threats to human health or the environment caused by certain releases or
24 threatened releases of hazardous substances, pollutants, contaminants or solid wastes at or from
25 the Site; and (b) to identify and evaluate remedial alternatives to prevent, mitigate or otherwise
26 respond to or remedy certain releases or threatened releases of hazardous substances, pollutants,
27 or contaminants at or from the Site, by conducting an FS in accordance with the National
28 Contingency Plan, 40 C.F.R. Part 300 ("NCP").

1 4. The activities conducted under this Order are subject to approval by EPA, and Respondent
2 shall provide all information for the RI and FS in a manner that is consistent with CERCLA and
3 the NCP, 40 C.F.R. Part 300. The activities under this Order shall be conducted in compliance
4 with the attached Statement of Work ("SOW"), attached hereto as Attachment 1, and all
5 applicable EPA guidance, policies, and procedures.

6 II. FINDINGS OF FACT

7 5. a. The Site is an abandoned, low-grade copper mine and extraction facility located in the
8 Mason Valley, in Lyon County, Nevada. The Site is located approximately one mile west of
9 Yerington, directly off of Highway 95. The Site occupies 3,468.50 acres of disturbed land in a
10 rural area, bordered to the north by open fields of alfalfa and residential acreage, and to the east by
11 Highway 95, which separates the Site from the city of Yerington, Nevada. Approximately fifty
12 percent of the Site is privately owned land, and the rest is land within the jurisdiction, custody and
13 control of the United States Bureau of Land Management ("BLM"). To the south continues BLM
14 range land, and to the west and southwest the Singatse mountains.

15 6. Facilities associated with mining operations at the Site include an open-pit mine, mill
16 buildings, tailing piles, waste fluid ponds, and the adjacent residential settlement known as Weed
17 Heights. A network of leach vats, heap leaching pads and evaporation ponds remains throughout
18 the Site, in addition to a lead working shop, a welding shop, a maintenance shop, two warehouses,
19 an electro-winning plant, and an office building.

20 7. The Site began operation in or about 1918, originally known as the Empire Nevada Mine.
21 In 1953, Anaconda Copper Mining Company ("Anaconda") acquired and began operating the
22 Site. In or about 1977, Respondent acquired Anaconda and assumed its operations at the Site. In
23 June 1978, Respondent terminated operations at the Site. In or about 1982, Respondent sold its
24 interests in the private lands within the Site to Don Tibbals, a local resident, who subsequently
25 sold his interests with the exception of the Weed Heights community to Arimetco, Inc.
26 ("Arimetco"), the current owner. Arimetco operated a copper recovery operation from existing
27 ore heaps within the Site from 1989 to November 1999. Arimetco has terminated operations at

1 the Site and is currently managed under the protection of the United States Bankruptcy Court in
2 Tucson, Arizona.

3 8. During the 25-year operational period that Anaconda and Respondent operated the Site,
4 they removed approximately 360 million tons of ore and debris from the open pit mine, much of
5 which now remains in tailings or leach heap piles. Anaconda and Respondent beneficiated copper
6 ores from the mine by two separate methods depending on the ore type. The mined ore contained
7 copper oxides in the upper portion of the open pit and copper sulfides in a lower portion of the
8 open pit. During on-Site milling operations, a copper precipitate was produced from the oxide ore
9 and a copper concentrate was produced from the sulfide ore. In the first of two processing
10 methods for the oxide ore, the operator placed the copper oxide ore in leaching vats and leached
11 out copper with sulfuric acid. The copper precipitated out after passing over iron scraps. The
12 second process, which started in 1965, used dilute sulfuric acid spread over the top of low grade
13 oxide ore piles from which copper would leach out with the resulting acidic solution, with the
14 copper again precipitated out after passing over iron scraps. Anaconda and Respondent utilized
15 this dump leaching method for over 10 years at the W-3 dump at the Site. To facilitate their
16 leaching operations, Anaconda and Respondent produced their own sulfuric acid at the Site at a
17 rate of over 400 tons per day. To process the copper sulfide ore, Anaconda and Respondent
18 crushed the ore and produced copper concentrate by flotation, with lime (calcium oxide) added to
19 maintain an alkaline pH. The resulting copper concentrate would be shipped off-Site for final
20 processing.

21 9. Byproducts of the milling operation were wet gangue from the sulfide ore and wet tailings
22 and iron- and sulfate-rich acid brine from the oxide ore. Respondent left gangue and tailings at
23 the Site in large dumps and ponds. Respondent evaporated the acid brine in large evaporation
24 ponds, some of which ponds were equipped with asphalt liners, while others were unlined. Aerial
25 photographs taken in August 1977 indicated that the disposal ponds occupied approximately
26 1,377 acres. The evaporation pond and the tailings piles may have leached contaminants into the
27 groundwater.

10. Arimetco used solvent extraction and electro-winning to extract copper from copper oxide ore, including the reprocessing of some ore first processed by Anaconda or Respondent. The process used by Arimetco involved leaching the ore successively with a mild acid solution and kerosene in three process vats with a total storage of 200,000 gallons. A stronger sulfuric acid solution subsequently removed copper from the kerosene solution. A final electro-winning plant plated the copper onto stainless steel sheets. Arimetco recirculated the acid solution from the electro-winning vats back to the leach heaps. The leach heap pads currently drain acidic fluids. Records indicate that on February 3, 1997, there was a 40,000 gallon spill of sulfuric acid from Arimetco's facilities.

11. Atlantic Richfield maintained assorted tanks throughout the Site for acetylene gas, nitrogen gas, oxygen gas, liquid nitrogen, unleaded gasoline, and diesel fuel. These materials were used on-Site for vehicle maintenance and refueling.

12. In 1999, at the request of the Yerington Paiute Tribe, EPA began an evaluation of the Site to determine the effectiveness of the existing pump-back system in preventing off-Site migration of contaminated groundwater and to determine whether any domestic wells had been impacted by the Site. EPA collected groundwater samples from on-Site monitoring wells, from the Wabuska Drain, and from nearby residential and community wells, including the wells of the Yerington Paiute Tribe. In November 1999, the Nevada Division of Environmental Protection ("NDEP") collected additional samples to provide data to support model scoring under the Hazard Ranking System for groundwater and surface water migration pathways. Analyses of samples from the monitoring wells indicated concentrations of arsenic at 50 to 100 parts per billion ("ppb"), cadmium at 8 to 20 ppb, iron up to 1,400,000 ppb, mercury at 0.4 to 0.7 ppb, and nickel at 100 to 1200 ppb. In addition, samples from a shallow groundwater monitoring well located less than a quarter mile from the Site contained concentrations of arsenic at 60 ppb, copper at 30 ppb, and iron at 4,300 ppb. Drinking water maximum contaminant levels, for comparison, are as follows: arsenic at 10 ppb; cadmium at 5 ppb; iron at 600 ppb; mercury at 2 ppb; and nickel at 100 ppb.

13. Analyses of samples from domestic and agricultural water wells indicated that concentrations of salinity and, in some instances, iron were high. Arsenic concentrations in most

1 production wells were below or at the detection limit of 20 ppb, except at four residential wells
2 near the northwest corner of the Site on Luzier and Locust Lanes, which exhibited arsenic
3 concentrations from 40 to 60 ppb.

4 14. Results of surface water analyses indicated elevated concentrations of arsenic, iron, lead,
5 manganese and sulfate immediately downgradient of the Site in the Wabuska Drain. These
6 concentrations diminished with distance from the Site along the length of the drain.

7 15. EPA confirmed that over 3,000 acres of tailings with a potentially high concentration of
8 metals remained at the Site, and that the abandoned process fluids emanating from the tailings
9 have a low pH and contain excessive quantities of arsenic, cadmium, chromium, copper, and iron.
10 Salts precipitating from these seeps contain even higher concentrations of such metals. Also
11 present are radionuclides, including uranium, thorium, and radium.

12 16. In October 2000, EPA conducted an Expanded Site Inspection at the Site, which consisted
13 of collecting groundwater samples from six monitoring wells on and around the Site, and samples
14 of standing water from a below ground cellar, pregnant leachate solution, tailings and leachate
15 salts. These samples again confirmed high concentrations of contaminants, including beryllium,
16 cadmium, chromium, lead, mercury, and selenium. The groundwater monitoring well samples
17 revealed levels above the regulatory limits for drinking water of arsenic, beryllium, cadmium,
18 chromium, lead, and selenium. EPA concluded from this study that toxic heavy metals exist in
19 source materials at the Site and have contaminated groundwater. The local groundwater is a
20 source of drinking water for an approximate 5,020 people living within four miles of the Site.

21 17. In November 2001, EPA obtained and analyzed surface and subsurface soil samples from
22 within the Site and from off-Site areas that might have been affected by the Site (specifically the
23 Yerington Paiute Colony). Off-Site sampling in these potentially affected areas revealed arsenic
24 levels above EPA's Preliminary Remediation Goals ("PRGs"). In this November 2001 study,
25 EPA also assessed Site security and identified security concerns regarding the lack of maintained
26 fencing and unauthorized access with dirt bikes and four-wheel-drive off-road vehicles.

1 18. In December 2003, EPA conducted a screening level gamma ray survey of the surface
2 sediments in evaporation ponds and detected radiation levels in excess of three times background.

3 19. Since September 2002, Respondent has been conducting response activities at the Site
4 pursuant to a consent agreement with NDEP. As part of this work, since December 2003,
5 Respondent has been sampling domestic wells north of the mine Site and has found that fifty
6 seven wells have gross alpha radiation levels of up to seven times the regulatory limit (78.4 pico-
7 Curies per liter) and thirty-four of those wells have uranium levels of up to four times the
8 regulatory limit (101 micrograms per liter). Respondent has voluntarily provided bottled water to
9 residents whose wells exceed the regulatory limits, and is currently providing bottled water to
10 sixty households north of the mine. On the Yerington Paiute Reservation, where one of the tribal
11 supply wells exceeded the regulatory limit for uranium and gross alpha radiation, Respondent is
12 providing bottled water to another eighty households.

13 20. From June through December 2004, BLM conducted a surface radiological survey of the
14 process areas of the Site and certain other portions of the Site, and soil sampling from areas of
15 elevated radiation. The samples indicated substantially elevated levels of radium 226 at 9,300
16 pico-Curies per gram ("pCi/gm"), which is above EPA's PRG of 3.7 pCi/gm for an industrial
17 worker and radium 228 at 78 pCi/gm, which is above EPA's PRG of 8.4 pCi/gm for an industrial
18 worker. This survey identified areas with elevated levels exceeding PRGs for uranium and
19 thorium radioisotopes and exposure rates as high as 5 milliREM per hour (more than two times
20 EPA's guidance level for unrestricted property). The identified occurrence of the radiological
21 contaminants at greater than background levels indicates that process solutions, copper ore, and
22 potentially waste rock throughout the Site could contain disturbed or "technologically enhanced"
23 naturally occurring radioactive materials, which may have migrated from the Site through
24 saturated sediment, sludges, crushed and uncrushed rock, fugitive dust and precipitated solutions
25 and be impacting surface water and groundwater.

26 21. Early in April 2006, the United States Fish and Wildlife Service reported observing a dead
27 bird nearby some standing fluid on the sulfide tailings during the course of a natural resource
28 damage assessment. In considering whether the bird mortality resulted from the ingestion of the

fluid, which appears to be the result of precipitation that had dissolved existing residues from past mining activities, EPA obtained and analyzed fluid samples from five areas of standing fluids on the north end of the Site. The sampling addressed: the three pumpback containment ponds; areas of standing water within the asphalt-lined evaporation ponds; and the Arimetco pregnant solution collection ditch adjacent to the Vat Leach Heap Leach Pad. Preliminary analytical results indicate very low pH fluids containing elevated uranium and metals in each of the three areas as follows: (1) the pumpback ponds exhibit low pH ranging from 2.6 to 4.0, with uranium concentrations from 850 to 2,100 ug/l and elevated metals up to 10 times or greater than those seen in the extraction wells supplying the ponds; (2) an area of standing water, exhibited a pH of 0.29, uranium at 27,000 ug/l and elevated metals up to 4 times higher than seen in EPA's October 2000 sampling of similar standing fluid in a below ground cellar; and (3) the Arimetco fluid sampled exhibited a pH of 2.7, uranium at 8,900 ug/l and elevated metals at approximately the same magnitude as seen in EPA's October 2000 sampling of similar pregnant solutions. Fluids with such low pH and elevated metals potentially pose acute toxicity to wildlife. Additionally, the elevated uranium concentrations pose a threat of substantial harm to the public health or welfare or the environment.

22. Carcinogens at the Site include arsenic, chromium, the radioisotopes of uranium (uranium-234, uranium-235, and uranium-238), the radioisotopes of thorium (thorium-230 and thorium-232), and the radioisotopes of radium (radium-228 and radium-226). Aluminum, arsenic, beryllium, boron, cadmium, copper, iron, lead, manganese, mercury, molybdenum, selenium, zinc, uranium, and chloride and sulfate are toxic metal contaminants at the Site. Disturbed and concentrated heavy metals at the Site pose threats through inhalation and ingestion that can result in neurological, kidney, and liver damage, and behavior and learning problems.

23. By agreement with NDEP, EPA has assumed the lead agency role for this Site.

24. The Administrative Record supporting this action is available for review at the EPA Region IX offices located at 75 Hawthorne Street, San Francisco, California (94105).

III. CONCLUSIONS OF LAW AND DETERMINATIONS

25. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

26. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

27. The contamination found at the Site, as identified in Section II of this Order (Findings of Fact), includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

28. Respondent owned or operated the facility during a period of time when hazardous substances were disposed of and is, therefore, a "liable" party as defined in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is subject to this Order under Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

29. The conditions at that Site, as described in Section II of this Order (Findings of Fact), constitute an actual or threatened "release," as defined in Section 101(22) of CERCLA, 40 U.S.C. § 9601(22). The potential for future migration of hazardous substances from the Site poses a threat of a continued "release."

30. The release or threat of release of one or more hazardous substances from the Site may present an imminent and substantial endangerment to the public health or welfare or the environment under Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

31. The actions required by this Order are necessary to protect the public health, welfare, and the environment and are consistent with the NCP and CERCLA.

1 IV. NOTICE TO THE STATE AND BLM

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3 32. On January 11, 2007, prior to issuance of this Order, EPA notified the NDEP and the
4 BLM that EPA would be issuing this Order.

5 V. ORDER

6 33. Based on the foregoing, Respondent is hereby ordered to comply with the following
7 provisions, including but not limited to, all attachments to this Order, all documents incorporated
8 by reference into this Order, and all schedules and deadlines in this Order and its attachments.

9 VI. DEFINITIONS

10
11 34. Unless otherwise expressly provided herein, terms used in this Order which are defined in
12 CERCLA or in regulations promulgated thereunder shall have the meaning assigned to them in
13 the statute or the implementing regulations. Whenever terms listed below are used in this Order
14 or in the documents attached to this Order or incorporated by reference into this Order, the
15 following definitions shall apply:

16 "BLM" shall mean the United States Department of the Interior, Bureau of Land
17 Management.

18 "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and
19 Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 *et seq.*

20 "Day" shall mean a calendar day unless expressly stated to be a working day. "Working
21 day" shall mean a day other than a Saturday, Sunday, or federal holiday. In computing any period
22 of time under this Order, where the last day would fall on a Saturday, Sunday or federal holiday,
23 the period shall run until the end of the next working day.

24
25 "Effective Date" shall mean the Effective Date of this Order as provided in Section XVI.

1 "Engineering Controls" shall mean constructed containment barriers or systems that
2 control one or more of the following: downward migration, infiltration or seepage of surface
3 runoff or rain; or natural leaching or migration of contaminants through the subsurface over time.
4 Examples of "Engineering Controls" include caps, engineered bottom barriers, immobilization
5 processes and vertical barriers.

6 "EPA" shall mean the United States Environmental Protection Agency, Region IX.

7 "Institutional Controls" shall mean non-engineered instruments, such as administrative or
8 legal controls, that help to minimize the potential for human exposure to contamination and/or
9 protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional
10 controls include easements and covenants, zoning restrictions, special building permit
11 requirements, and well drilling prohibitions.

12 "National Contingency Plan" or "NCP" shall mean the National Contingency Plan
13 promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part
14 300, including any amendments thereto.

15 "Operable Unit" shall mean the discrete areas or tasks within the Site as determined by
16 similarities in the location or hazardous substances present, and as further defined in the SOW.

17 "Paragraph" shall mean a portion of this Order identified by an arabic numeral.

18 "Response Costs" shall mean all costs, including direct costs, indirect costs, and accrued
19 interest incurred by the United States to perform or support response actions at the Site. Response
20 costs include but are not limited to the costs of overseeing the Work, such as the costs of
21 reviewing or developing plans, reports and other items pursuant to this Order and costs associated
22 with verifying the Work.

23 "Statement of Work" or "SOW" shall mean the statement of work for implementation of
24 the RI and FS, as set forth in Attachment 1 to this Order.

“Section” shall mean a portion of this Order identified by a roman numeral and includes one or more Paragraphs, unless otherwise referenced. References to sections in the SOW will be so identified (i.e., “SOW Section V”).

“Site” shall mean the Anaconda/Yerington Copper Mine Site, encompassing 3,468 acres, located at 103 Birch Drive, near Yerington, Nevada, in Lyon County, and as generally depicted in Attachment 2.

"State" shall mean the state of Nevada.

"United States" shall mean the United States of America.

"Work" shall mean all activities that Respondent is required to perform under this Order, except those required in Paragraph 71 (Retention of Records).

VII. NOTICE OF INTENT TO COMPLY

35. Respondent shall provide, not later than February 1, 2007, or ten (10) days after the Effective Date of this Order, whichever is later, a written notice to EPA's Remedial Project Manager ("RPM") stating whether it will comply with the terms of this Order. If Respondent does not unequivocally commit to perform the Work as provided by this Order, it shall be deemed to have violated this Order and to have failed or refused to comply with this Order. Respondent's written notice shall describe, using facts that exist on or prior to the Effective Date of this Order, any "sufficient cause" defenses asserted by Respondent under Sections 106(b) and 107(c)(3) of CERCLA, 42 U.S.C. §§ 9606(b) and 9607(c)(3). The absence of a response by EPA to the notice required by this Paragraph shall not be deemed to be acceptance of Respondent's assertions.

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VIII. PARTIES BOUND

36. This Order shall apply to and shall be binding on Respondent and on its directors, officers, employees, agents, successors, and assigns. No change in the ownership, corporate status, or other control of any of the entities referenced in this Paragraph shall alter any of Respondent's responsibilities under this Order. No change in the ownership, corporate status, or other control of Respondent shall alter any of Respondent's responsibilities under this Order.

37. Respondent shall provide a copy of this Order to any prospective owners or successors before a controlling interest in Respondent's assets, property rights, or stock are transferred to the prospective owner or successor. Respondent shall provide a copy of this Order to each contractor, sub-contractor, laboratory, or consultant retained to perform any Work under this Order, within five (5) days after the Effective Date of this Order or on the date such services are retained, whichever date occurs later. Respondent shall also provide a copy of this Order to each person representing Respondent with respect to the Site or the Work and shall condition all contracts and subcontracts entered into hereunder upon performance of the Work in conformity with the terms of this Order. With regard to the activities undertaken pursuant to this Order, each contractor and subcontractor shall be deemed to be related by contract to Respondent within the meaning of Section 107(b)(3) of CERCLA, 42 U.S.C. § 9607(b)(3). Notwithstanding the terms of any contract, Respondent is responsible for compliance with this Order and for ensuring that its contractors, subcontractors and agents comply with this Order and perform any Work in accordance with this Order.

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IX. WORK TO BE PERFORMED

38. Respondent shall cooperate with EPA in providing information regarding the Work to the public. As requested by EPA, Respondent shall participate in the preparation of such information for distribution to the public and in public meetings that may be held or sponsored by EPA to explain activities at or relating to the Site.

1 39. Selection of Contractors, Personnel. All Work performed under this Order shall be under
2 the direction and supervision of qualified personnel. Prior to the execution of this Order,
3 Respondent provided EPA in writing with information sufficient to demonstrate the qualifications
4 of the personnel, including contractors, subcontractors, consultants and laboratories to be used in
5 carrying out the Work and EPA approved those individuals and entities. During the course of the
6 RI/FS, Respondent shall notify EPA in writing prior to making any changes or additions in the
7 personnel used to carry out such Work, providing their names, titles and qualifications, and any
8 changes or additions to the personnel will be subject to EPA's approval. If EPA disapproves in
9 writing of any replacement's or addition's technical qualifications, Respondent shall notify EPA
10 of the identity and qualifications of new proposed replacements or additions within thirty (30)
11 days of the written notice. If EPA again disapproves of a replacement or addition, Respondent
12 shall propose a new replacement or addition and the process shall continue until EPA approves a
13 replacement.

14 40. Within ten (10) days after the Effective Date, Respondent shall designate a Project
15 Coordinator who shall be responsible for administration of all actions by Respondent required by
16 this Order and shall submit to EPA the designated Project Coordinator's name, address, telephone
17 number, and qualifications. To the greatest extent possible, the Project Coordinator shall be
18 present on-Site or readily available during Site Work. EPA retains the right to disapprove of the
19 designated Project Coordinator. If EPA disapproves of the designated Project Coordinator,
20 Respondent shall retain a different Project Coordinator and shall notify EPA of that person's
21 name, address, telephone number and qualifications within fifteen (15) days following EPA's
22 disapproval. Respondent shall have the right to change its Project Coordinator, subject to EPA's
23 right to disapprove. Respondent shall notify EPA at least ten (10) days before such a change is
24 made. The initial notification may be made orally, but shall be promptly followed by a written
25 notification. Receipt by Respondent's Project Coordinator of any notice or communication from
26 EPA relating to this Order shall constitute receipt by Respondent.

27 41. EPA has designated Jim Sickles of the EPA Region IX Superfund Division as its RPM,
28 and Nadia Hollan-Burke as its alternate RPM if the designated RPM is unavailable. Except as

1 otherwise provided in this Order, Respondent shall direct all submissions required by this Order to
2 the RPM at:

3 Environmental Protection Agency, Region IX
4 75 Hawthorne Street (SFD-7)
5 San Francisco, CA 94105
6

7 And to:

8
9 Patrick Plumb, Project Manager
10 U.S. Bureau of Land Management
11 1340 Financial Boulevard
12 Reno, NV 89520

13 42. The RPM shall have the authority lawfully vested in an RPM by the NCP. In addition, the
14 RPM shall have the authority consistent with the NCP, to halt any Work required by this Order,
15 and to take any necessary response action when he determines that conditions at the Site may
16 present an immediate endangerment to public health or welfare or the environment. The absence
17 of the RPM from the area under study pursuant to this Order shall not be cause for the stoppage or
18 delay of Work.

19 43. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct
20 of the RI and FS, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such
21 person shall have the authority to observe Work and make inquiries in the absence of EPA, but
22 not to modify the RI/FS Work Plan.

23 44. Performance of RI and FS. Respondent shall conduct the RI and FS in accordance with
24 the provisions of this Order, the SOW, CERCLA, the NCP and EPA guidance, including, but not
25 limited to the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility
26 Studies under CERCLA" (OSWER Directive # 9355.3-01, October 1988 or subsequently issued
27 guidance), "Guidance for Data Useability in Risk Assessment" (OSWER Directive #9285.7-05,
28 October 1990), and guidance referenced therein, and guidances referenced in the SOW, as may be
29 amended or modified by EPA. As specified in the SOW, the RI shall consist of collecting data to
30 characterize Site conditions, determining the nature and extent of the contamination at or from the
31 Site, assessing risk to human health and the environment and conducting treatability testing as

1 necessary to evaluate the potential performance and cost of the treatment technologies that are
2 being considered. As specified in the SOW, the FS shall determine and evaluate (based on
3 treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate or
4 otherwise respond to or remedy the release or threatened release of hazardous substances,
5 pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall
6 not be limited to, the range of alternatives described in the NCP, and shall include remedial
7 actions that utilize permanent solutions and alternative treatment technologies or resource
8 recovery technologies to the maximum extent practicable. In evaluating the alternatives,
9 Respondent shall address the factors required to be taken into account by Section 121 of
10 CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e). On
11 request by EPA, Respondent shall submit in electronic form all portions of any plan, report or
12 other deliverable that Respondent is required to submit pursuant to provisions of this Order or the
13 SOW.

14 45. RI/FS Work Plans. Within ninety (90) days after the Effective Date of this Order,
15 Respondent shall submit to EPA the initial work plan as indicated in the SOW. Respondent shall
16 submit successive work plans in accordance with the schedule set forth in the SOW. On the
17 approval of any respective work plan by EPA pursuant to Paragraphs 61-7 (EPA Approval of
18 Plans and Other Submissions), the respective work plans shall be incorporated into and become
19 enforceable under this Order, and the cumulation of approved work plans shall be known as the
20 "RI/FS Work Plans."

21 46. Sampling and Analysis Plan. Within ninety (90) days after the Effective Date, Respondent
22 shall submit a Sampling and Analysis Plan for site specific Operable Units as called out in the
23 SOW to EPA for review and approval pursuant to Paragraphs 61-7 (EPA Approval of Plans and
24 Other Submissions). This plan shall consist of a Field Sampling Plan ("FSP") and a Quality
25 Assurance Project Plan ("QAPP"), to implement the SOW, and shall adhere to EPA guidances,
26 including, without limitation, "EPA Guidance for Quality Assurance Project Plans (QA/G-
27 5)"(EPA/600/R-02/009, December 2002), and "EPA Requirements for Quality Assurance Project
28 Plans (QA/R-5)" (EPA 240/B-01/003, March 2001). On its approval by EPA pursuant to Section

X (EPA Approval of Plans and Other Submissions), the Sampling and Analysis Plan shall be incorporated into and become enforceable under this Order.

47. Site Health and Safety Plan. Within forty-five (45) days after the Effective Date of this Order, Respondent shall submit for EPA review and comment a Site Health and Safety Plan that ensures the protection of on-site workers and the public during performance of on-site Work under this Order. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. The plan also shall include contingency planning for on-site emergencies. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the RI/FS.

48. Community Relations Plan and Technical Assistance Plan. EPA will prepare a community relations plan, in accordance with EPA guidance and the NCP. As requested by EPA, Respondent shall provide information supporting EPA's community relations plan and shall participate in the preparation of such information for dissemination to the public and in public meetings that may be held or sponsored by EPA to explain activities at or concerning the Site. Within thirty (30) days of a request by EPA, Respondent shall provide a Technical Assistance Plan ("TAP") for providing and administering up to \$50,000 of Respondent's funds to be used by a qualified community group to hire independent technical advisers during the Work conducted pursuant to this Order. The TAP shall state that Respondent will provide and administer any additional amounts needed if EPA, in its discretion, determines that the selected community group has demonstrated such a need prior to EPA's issuance of the Record of Decision contemplated by this Order. On its approval by EPA pursuant to Paragraphs 61-7 (EPA Approval of Plans and Other Submissions), the TAP shall be incorporated into and become enforceable under this Order.

49. Site Characterization. Respondent shall implement the provisions of the RI/FS Work Plans and Sampling and Analysis Plan, to characterize the Site. Respondent shall complete Site characterization and submit all plans, reports and other deliverables in accordance with the

schedules and deadlines established in this Order, the SOW, or as otherwise may be provided in the approved RI/FS Work Plans and Sampling and Analysis Plan.

50. Baseline Human Health Risk Assessment and Ecological Risk Assessment. Respondent will perform the Baseline Human Health Risk Assessment and Ecological Risk Assessment ("Risk Assessments") in accordance with the SOW, RI/FS Work Plan and applicable EPA guidance, including but not limited to: "Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part A)," (RAGS, EPA-540-1-89-002, OSWER Directive 9285.7-01A, December 1989); "Interim Final Risk Assessment Guidance for Superfund, Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)," (RAGS, EPA 540-R-97-033, OSWER Directive 9285.7-01D, January 1998); "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments" (ERAGS, EPA-540-R-97-006, OSWER Directive 9285.7-25, June 1997).

51. Draft RI Report. Within one hundred twenty (120) days after notification to EPA of completion of field investigation activities, Respondent shall submit to EPA for review and approval pursuant to Paragraphs 61-7 (EPA Approval of Plans and Other Submissions), a Draft Remedial Investigation Report consistent with the SOW, RI/FS Work Plans, and the Sampling and Analysis Plan. The Draft RI Report shall also contain the Risk Assessments.

52. Treatability Studies. Respondent shall conduct treatability studies, except where Respondent can demonstrate to EPA's satisfaction that they are not needed. The major components of the treatability studies are described in the SOW. In accordance with the schedules or deadlines established in this Order, the SOW or the EPA-approved RI/FS Work Plans, Respondent shall provide EPA with the following plans, reports, and other deliverables for review and approval pursuant to Paragraphs 61-7 (EPA Approval of Plans and Other Submissions):

- (1) Identification of Candidate Technologies Memorandum. This memorandum shall be submitted within thirty (30) days after written determination by EPA of the need for a treatability study.

1 (2) Treatability Testing Statement of Work. If EPA determines that treatability testing is
2 required, within thirty (30) days thereafter, or as otherwise specified by EPA, Respondent
3 shall submit a Treatability Testing Statement of Work ("TTSOW").

4 (3) Treatability Testing Work Plan. Within sixty (60) days after submission of the
5 TTSOW, Respondent shall submit a Treatability Testing Work Plan, including a schedule.

6 (4) Treatability Study Sampling and Analysis Plan. Within ninety (90) days after
7 identification of the need for a separate or revised QAPP or FSP, Respondent shall submit
8 a Treatability Study Sampling and Analysis Plan.

9 (5) Treatability Study Site Health and Safety Plan. Within ninety (90) days after the
10 identification of the need for a revised Health and Safety Plan, Respondent shall submit a
11 Treatability Study Site Health and Safety Plan.

12 (6) Treatability Study Evaluation Report. Within 90 days after completion of any
13 treatability testing, Respondent shall submit a treatability study evaluation report as
14 provided in the Statement of Work and Work Plan.

15 53. Development and Screening of Alternatives. Respondent shall develop an appropriate
16 range of waste management options that will be evaluated through the development and screening
17 of alternatives, as provided in the SOW and RI/FS Work Plans. In accordance with the schedules
18 or deadlines established in this Order, the SOW or the EPA-approved RI/FS Work Plans,
19 Respondent shall provide EPA with the following deliverables for review and approval pursuant
20 to Paragraphs 61-7 (EPA Approval of Plans and Other Submissions):

21 (1) Memorandum on Remedial Action Objectives. The Memorandum on Remedial
22 Action Objectives shall include remedial action objectives for Engineering Controls as
23 well as for Institutional Controls.

(2) Memorandum on Development and Screening of Alternatives. The Memorandum shall summarize the development and screening of remedial alternatives.

54. Detailed Analysis of Alternatives. Respondent shall conduct a detailed analysis of remedial alternatives, as described in the SOW and RI/FS Work Plans. In accordance with the deadlines or schedules established in this Order, the SOW or the EPA-approved RI/FS Work Plans, Respondent shall provide EPA with the following deliverables and presentation for review and approval pursuant to Paragraphs 61-7 (EPA Approval of Plans and Other Submissions):

(1) Report on Comparative Analysis and Presentation to EPA. Within sixty (60) days after approval of the draft remedial investigation report and EPA's written determination that an FS is necessary, Respondent will submit a report on comparative analysis to EPA. Within thirty (30) days of submitting the report on comparative analysis, Respondent will present to EPA a summary of the findings of the remedial investigation and remedial action objectives, and present the results of the nine criteria evaluation and comparative analysis, as described in the SOW.

(2) Alternatives Analysis for Institutional Controls and Screening. Respondent shall submit a memorandum on the Institutional Controls identified in the Memorandum on Development and Screening of Alternatives as potential remedial actions. The Alternatives Analysis for Institutional Controls and Screening shall: (1) state the objectives (i.e., what will be accomplished) for the Institutional Controls; (2) determine the specific types of Institutional Controls that can be used to meet the remedial action objectives; (3) investigate when the Institutional Controls need to be implemented or secured and how long they must be in place; and (4) research, discuss and document any agreement with the proper entities (e.g., state, local government entities, local landowners, conservation organizations, Respondent) on exactly who will be responsible for securing, maintaining and enforcing the Institutional Controls. The Alternatives Analysis for Institutional Controls and Screening shall also evaluate the Institutional Controls identified in the Memorandum on Development and Screening of Alternatives against the nine evaluation criteria outlined in the NCP (40 C.F.R. 300.430(e)(9)(iii)) for CERCLA

1 cleanups, including but not limited to costs to implement, monitor or enforce the
2 Institutional Controls. The Alternatives Analysis for Institutional Controls and Screening
3 shall be submitted as an appendix to the Draft Feasibility Study Report.

4 (3) Draft Feasibility Study Report. Within ninety (90) days after the presentation to EPA
5 described in Paragraph 54(i)(1) and EPA's approval of the remedial alternatives screening
6 summary, Respondent shall submit to EPA a Draft FS Report that reflects the findings in
7 the Risk Assessments. Respondent shall refer to Table 6-5 of the RI/FS Guidance for
8 report content and format. The report, as amended, and the administrative record, shall
9 provide the basis for the proposed plan under Sections 113(k) and 117(a) of CERCLA, 42
10 U.S.C. §§ 9613(k) and 9617(a), and shall document the development and analysis of
11 remedial alternatives.

12 55. On receipt of the Draft FS report, EPA will evaluate, as necessary, the estimates of the risk
13 to the public and environment that are expected to remain after a particular remedial alternative
14 has been completed and will evaluate the durability, reliability and effectiveness of any proposed
15 Institutional Controls.

16 56. Modification of the RI/FS Work Plans.

17 a. If at any time during the RI or FS process, Respondent identifies a need for
18 additional data, including potential reuse or operation of mining activities at the Site, Respondent
19 shall submit a memorandum documenting the need for additional data to the RPM within sixty
20 (60) days of identification. EPA in its discretion will determine whether the additional data will
21 be collected by Respondent and whether it will be incorporated into any respective plans, reports
22 and other deliverables.

23 b. In the event of unanticipated or changed circumstances at the Site, Respondent
24 shall notify the RPM by telephone within twenty-four (24) hours of discovery of the unanticipated
25 or changed circumstances. In the event that EPA determines that the immediate threat or the
26 unanticipated or changed circumstances warrant changes in the RI/FS Work Plans, EPA may
27 modify or amend the RI/FS Work Plans in writing accordingly, or may require Respondent to

1 modify the RI/FS Work Plans subject to EPA's approval in accordance with Paragraphs 61-7
2 (EPA Approval of Plans and Other Submissions). Respondent shall perform the modified or
3 amended RI/FS Work Plans as provided or approved by EPA.

4 c. EPA may determine that in addition to tasks defined in any of the initially
5 approved RI/FS Work Plans, other additional Work may be necessary to accomplish the
6 objectives of this Order. Respondent shall perform these response actions in addition to those
7 required any of the initially approved RI/FS Work Plans, including any approved modifications, if
8 EPA determines that such actions are necessary to meet the purpose of this Order.

9 d. Respondent shall confirm its willingness to perform the additional Work in
10 writing to EPA within fourteen (14) days of receipt of any EPA request.

11 e. Respondent shall complete the additional Work according to the standards,
12 specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS
13 Work Plans or any written supplement. EPA reserves the right to conduct the Work itself at any
14 point, to seek reimbursement from Respondent, or to seek any other appropriate relief.

15 f. Nothing in this Paragraph shall be construed to limit EPA's authority to require
16 performance of further response actions at the Site.

17 57. Off-Site Shipment of Waste Material. Respondent shall, prior to any off-Site shipment of
18 hazardous substances from the Site to an out-of-state waste management facility, provide written
19 notification of such shipment of hazardous substances to the appropriate state environmental
20 official in the receiving facility's state and to EPA's RPM. However, this notification
21 requirement shall not apply to any off-Site shipments when the total volume of all such shipments
22 will not exceed 10 cubic yards.

23 a. Respondent shall include in the written notification the following information:
24 (1) the name and location of the facility to which the hazardous substances are to be shipped; (2)
25 the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the

shipment of the hazardous substances; and (4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.

b. Respondent shall provide the information required by this Paragraph to its respective contractors as soon as practicable after the award of the contract and before the hazardous substances are actually shipped.

c. Before shipping any hazardous substances, pollutants, or contaminants from the Site to an off-Site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall send hazardous substances, pollutants, or contaminants from the Site only to an off-Site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

58. Meetings. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI and FS. In addition to discussion of the technical aspects of the RI and FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

59. Progress Reports. In addition to the plans, reports and other deliverables set forth in this Order, Respondent shall provide to EPA monthly progress reports by the fifteenth (15th) day of the following month. At a minimum, with respect to the preceding month, these progress reports shall: (1) describe the actions that have been taken to comply with this Order during that month; (2) include all results of sampling and tests and all other data received by Respondent; (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI and FS completion; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

1 60. Emergency Response and Notification of Releases.

2 a. In the event of any action or occurrence during performance of the Work that
3 causes or threatens a release of Waste Material from the Site, that constitutes an emergency
4 situation or may present an immediate threat to public health or welfare or the environment,
5 Respondent shall immediately take all appropriate action. Respondent shall take these actions in
6 accordance with all applicable provisions of this Order, including, but not limited to, the Health
7 and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or
8 threatened by the release. Respondent also shall immediately notify the EPA RPM, in the event of
9 his unavailability, the Regional Duty Officer at (888) 254-3130, of the incident or Site conditions.
10 In the event that Respondent fails to take appropriate response action as required by this
11 Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the
12 response action not inconsistent with the NCP.

13 b. Respondent shall submit a written report to EPA within seven (7) days after each
14 such release, setting forth the events that occurred and the measures taken or to be taken to
15 mitigate any release or endangerment caused or threatened by the release and to prevent the
16 reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, any
17 reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the
18 Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

19 61. EPA Approval of Plans and Other Submissions. After review of any plan, report or other
20 item that is required to be submitted for approval pursuant to this Order, in a notice to Respondent
21 EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission subject to
22 specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole
23 or in part, the submission, and direct that Respondent modify the submission; or (e) any
24 combination of the above. However, EPA shall not modify a submission without first providing
25 Respondent at least one notice of deficiency and an opportunity to cure within fifteen (15) days,
26 except where to do so would cause serious disruption to the Work or where previous
27 submission(s) have been disapproved due to material defects.

62. On approval, approval subject to conditions, or modification by EPA, pursuant to Paragraph 61, Respondent shall proceed to implement any action required by the plan, report or other deliverable, as approved or modified by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA.

63. On receipt of a notice of disapproval, Respondent shall, within fifteen (15) days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Respondent shall not proceed with any activities or tasks until receiving EPA approval, approval on condition or modification. While awaiting EPA approval, approval on condition or modification of deliverables, Respondent shall proceed with all other tasks and activities that may be conducted independently in accordance with the schedule set forth under this Order. Respondent shall continue implementation of any activities or tasks regarding the Site that EPA approved prior to issuing this Order; however, EPA reserves the right to stop Respondent from proceeding, either temporarily or permanently, on any task, activity or deliverable at any point during the RI or FS.

64. If EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA also shall retain the right to modify or develop the plan, report or other deliverable, and Respondent shall implement any such plan, report, or deliverable as ultimately corrected, modified or developed by EPA.

65. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports.

66. All plans, reports, and other deliverables submitted to EPA under this Order shall, on approval or modification by EPA, be incorporated into and enforceable under this Order. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA

1 under this Order, the approved or modified portion shall be incorporated into and enforceable
2 under this Order.

3 67. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions
4 within a specified time period, nor the absence of comments, shall be construed as approval by
5 EPA. Regardless of whether EPA gives express approval for Respondent's deliverables,
6 Respondent is responsible for preparing deliverables acceptable to EPA.

7 68. Quality Assurance, Sampling, and Access to Information.

8 a. Quality Assurance. Respondent shall assure that Work performed, samples
9 taken and analyses conducted conform to the requirements of the SOW, the QAPP and guidances
10 identified therein. Respondent will assure that field personnel used by Respondent are properly
11 trained in the use of field equipment and in chain of custody procedures. Respondent shall only
12 use laboratories that have a documented quality system that complies with "EPA Requirements
13 for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent
14 documentation as determined by EPA.

15 b. Sampling. All results of sampling, tests, modeling or other data (including raw
16 data) generated by Respondent, or on Respondent's behalf, during the period that this Order is
17 effective, shall be submitted to EPA in the next monthly progress report as described in Paragraph
18 59 of this Order. EPA will make available to Respondent validated data generated by EPA unless
19 it is exempt from disclosure by any federal or state law or regulation. Respondent shall verbally
20 notify EPA at least fifteen (15) days prior to conducting significant field events as described in the
21 SOW, RI/FS Work Plans or Sampling and Analysis Plan. At EPA's verbal or written request, or
22 the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be
23 taken by EPA (and its authorized representatives) of any samples collected in implementing this
24 Order. All split samples shall be analyzed by the methods identified in the QAPP.

25 c. Access to Information. EPA is responsible for the release to the public of
26 documents or reports through any phase of the RI or FS. EPA will determine the contents of the
27 administrative record file for selection of any response action. Respondent shall provide to EPA,

1 on request, copies of all documents and information within its possession or control or that of its
2 contractors or agents relating to activities at the Site or to the implementation of this Order,
3 including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking
4 logs, receipts, reports, sample traffic routing, correspondence, or other documents or information
5 related to the Work. Respondent also shall make available to EPA, for purposes of investigation,
6 information gathering, or testimony, its employees, agents, or representatives with knowledge of
7 relevant facts concerning the performance of the Work. Respondent may assert business
8 confidentiality claims covering part or all of the documents or information submitted to EPA
9 under this Order to the extent permitted by and in accordance with Section 104 of CERCLA, 42
10 U.S.C. § 9604, and 40 C.F.R. § 2.203(b). Documents or information determined to be
11 confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no
12 claim of confidentiality accompanies documents or information when they are submitted to EPA,
13 or if EPA has notified Respondent that the documents or information are not confidential under
14 the standards of Section 104 of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given
15 access to such documents or information without further notice to Respondent. Respondent shall
16 segregate and clearly identify all documents or information submitted under this Order for which
17 Respondent asserts business confidentiality claims. Respondent may assert that certain
18 documents, records and other information are privileged under the attorney-client privilege or any
19 other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of
20 providing documents, it shall provide EPA with the following: 1) the title of the document,
21 record, or information; 2) the date of the document, record, or information; 3) the name and title
22 of the author of the document, record, or information; 4) the name and title of each addressee and
23 recipient; 5) a description of the contents of the document, record, or information; and 6) the
24 privilege asserted by Respondent. However, no documents, reports or other information created
25 or generated pursuant to the requirements of this Order shall be withheld on the grounds that they
26 are privileged. No claim of confidentiality or privilege shall be made with respect to any data,
27 including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific,
28 chemical, or engineering data.

29 d. Documents Supporting EPA Selection of Remedy. Respondent must submit to
30 EPA documents developed during the course of the RI or FS upon which selection of a response

1 action may be based. Respondent shall provide copies of plans, task memoranda for further
2 action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical
3 reports and other reports. Respondent must additionally submit any previous studies conducted
4 under state, local or other federal authorities relating to selection of the response action, and all
5 communications between Respondent and state, local or other federal authorities concerning
6 selection of the response action.

7 69. Site Access. If the Site, or any other property where access is needed to implement this
8 Order, is owned or controlled by Respondent, Respondent shall, commencing on the Effective
9 Date, provide EPA and its representatives, including contractors, with access at all reasonable
10 times to the Site, or such other property, for the purpose of conducting any activity related to this
11 Order, including: (a) inspecting conditions, activities, the results of activities, records, operating
12 logs, and contracts related to the Work or Respondent and its representatives or contractors
13 pursuant to this Order; (b) reviewing the progress of Respondent in carrying out the terms of this
14 Order; (c) conducting tests as EPA or its authorized representatives or contractors deem
15 necessary; (d) using a camera, sound recording device or other documentary type equipment; and
16 (e) verifying the data submitted to EPA by Respondent. Where any action under this Order is to
17 be performed in areas owned by or in possession of someone other than Respondent, Respondent
18 shall use its best efforts to obtain all necessary access agreements. Respondent shall immediately
19 notify EPA if, after using its best efforts, it is unable to obtain such agreements. For purposes of
20 this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration
21 of access. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot
22 obtain access agreements, EPA may either: (i) obtain access for Respondent or assist Respondent
23 in gaining access to the extent necessary to effectuate the response actions described herein, using
24 such means as EPA deems appropriate; or (ii) perform those tasks or activities with EPA
25 contractors. Except as provided above in this Paragraph, Respondent shall reimburse EPA for all
26 costs and attorney's fees incurred by the United States in obtaining such access. If EPA performs
27 those tasks or activities with EPA contractors, Respondent shall perform all other tasks or
28 activities not requiring access to that property, and shall reimburse EPA for all costs incurred in
29 performing such tasks or activities. Respondent shall integrate the results of any such tasks or
30 activities undertaken by EPA into its plans, reports and other deliverables. Notwithstanding any

1 provision of this Order, EPA retains all of its access authorities and rights, including enforcement
2 authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or
3 regulations.

4 70. Compliance with Other Laws and the NCP. Respondent shall comply with all applicable
5 local, state and federal laws and regulations when performing the RI and FS. EPA has determined
6 that the activities contemplated by this Order are consistent with the NCP. No local, state, or
7 federal permit shall be required for any portion of any action conducted entirely on-Site, including
8 studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42
9 U.S.C. § 9621. Where any portion of the Work is to be conducted off-Site and requires a federal
10 or state permit or approval, Respondent shall submit timely and complete applications and take all
11 other actions necessary to obtain and to comply with all such permits or approvals. This Order is
12 not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or
13 regulation.

14 71. Retention of Records. a. During the pendency of this Order and for a minimum of ten
15 (10) years after commencement of construction of any remedial action, Respondent shall preserve
16 and retain all non-identical copies of documents, records, and other information (including
17 documents, records, or other information in electronic form) now in its possession or control or
18 that come into its possession or control that relate in any manner to the performance of the Work
19 or the liability of any person under CERCLA with respect to the Site, regardless of any corporate
20 retention policy to the contrary. Until ten (10) years after commencement of construction of any
21 remedial action, Respondent also shall instruct its contractors and agents to preserve all
22 documents, records, and other information of whatever kind, nature or description relating to
23 performance of the Work. At the conclusion of this document retention period, Respondent shall
24 notify EPA at least ninety (90) days prior to the destruction of any such documents, records or
25 other information, and, on request by EPA, Respondent shall deliver any such documents, records,
26 or other information to EPA, at no cost to EPA. Respondent may assert that certain documents,
27 records, and other information are privileged under the attorney-client privilege or any other
28 privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA
29 with the following: 1) the title of the document, record, or other information; 2) the date of the

document, record, or other information; 3) the name and title of the author of the document, record, or other information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or other information; and 6) the privilege asserted by Respondent. However, no documents, records or other information created or generated pursuant to the requirements of this Order shall be withheld on the grounds that they are privileged.

X. DELAY IN PERFORMANCE

72. Any delay in performance of this Order that, in EPA's discretion, is not properly justified by Respondent under the terms of this Section shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondent's obligations to fully perform all obligations under the terms and conditions of this Order.

73. Respondent shall notify EPA of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone to EPA's RPM within forty-eight (48) hours after Respondent first knew or should have known that a delay might occur. Respondent shall adopt all reasonable measures to avoid or minimize any such delay. Within five (5) business days after notifying EPA by telephone, Respondent shall provide written notification fully describing the nature of the delay, any justification for delay, any reason why Respondent should not be held strictly accountable for failing to comply with any relevant requirements of this Order, the measures planned and taken to minimize the delay, and a schedule for implementing the measures that will be taken to mitigate the effect of the delay. EPA may, in its sole and unreviewable discretion, grant an extension of any schedule for good cause shown. Increased costs or expenses associated with implementation of the activities called for in this Order are not a justification for any delay in performance.

XI. ASSURANCE OF ABILITY TO COMPLETE WORK

74. Within thirty (30) days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in one or more of the following forms, in order to secure the full and final completion of Work by Respondent:

1 a. a surety bond unconditionally guaranteeing payment and/or performance of the
2 Work;

3 b. one or more irrevocable letters of credit, payable to or at the direction of EPA,
4 issued by financial institution(s) acceptable in all respects to EPA equaling the total
5 estimated cost of the Work;

6 c. a trust fund administered by a trustee acceptable in all respects to EPA;

7 d. a policy of insurance issued by an insurance carrier acceptable in all respects to
8 EPA, which ensures the payment or performance of the Work;

9 e. a corporate guarantee to perform the Work provided by one or more parent or
10 affiliated corporations or subsidiaries of Respondent, including a demonstration
11 that any such company satisfies the financial test requirements of 40 C.F.R. Part
12 264.143(f); or

13 f. a corporate guarantee to perform the Work by Respondent, including a
14 demonstration that it satisfies the requirements of 40 C.F.R. Part 264.143(f).

15 75. Any and all financial assurance instruments provided pursuant to this Section shall be in
16 form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that
17 EPA determines at any time that the financial assurances provided pursuant to this Section
18 (including, without limitation, the instrument(s) evidencing such assurances) are inadequate,
19 Respondent shall, within thirty (30) days of receipt of notice of EPA's determination, obtain and
20 present to EPA for approval one of the other forms of financial assurance listed in Paragraph 74,
21 above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing
22 the Work has increased, then, within thirty (30) days of such notification, Respondent shall obtain
23 and present to EPA for approval a revised form of financial assurance (otherwise acceptable under
24 this Section) that reflects such cost increase. Respondent's inability to demonstrate financial

1 ability to complete the Work shall in no way excuse performance of any activities required under
2 this Order.

3 76. If Respondent seeks to ensure completion of the Work through a guarantee pursuant to
4 Paragraph 74(e) or 74(f) of this Order, Respondent shall: (i) demonstrate to EPA's satisfaction
5 that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) resubmit sworn
6 statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the
7 anniversary of the Effective Date, to EPA. For the purposes of this Order, wherever 40 C.F.R.
8 Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current
9 plugging and abandonment costs estimates," the current cost estimate of \$18,000,000 for the
10 Work at the Site shall be used in relevant financial test calculations.

11 77. If, after the Effective Date, Respondent can show that the estimated cost to complete the
12 remaining Work has diminished below the amount set forth in Paragraph 76, Respondent may, on
13 any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the
14 amount of the financial security provided under this Section to the estimated cost of the remaining
15 Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in
16 accordance with the requirements of this Section, and may reduce the amount of the security after
17 receiving written approval from EPA.

18 78. Respondent may change the form of financial assurance provided under this Section at any
19 time, on notice to and prior written approval by EPA, provided that EPA determines that the new
20 form of assurance meets the requirements of this Section.

21 XII INSURANCE

22 79. At least five (5) days prior to commencing any On-Site Work under this Order,
23 Respondent shall secure, and shall maintain for the duration of this Order, comprehensive general
24 liability insurance and automobile insurance with limits of \$2,000,000 dollars, combined single
25 limit, naming the EPA as an additional insured. Within the same period, Respondent shall
26 provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent

1 shall submit such certificates and copies of policies each year on the anniversary of the Effective
2 Date. In addition, for the duration of the Order, Respondent shall satisfy, or shall ensure that its
3 contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of
4 workers' compensation insurance for all persons performing the Work on behalf of Respondent in
5 furtherance of this Order. If Respondent demonstrates by evidence satisfactory to EPA that any
6 contractor or subcontractor maintains insurance equivalent to that described above, or insurance
7 covering some or all of the same risks but in an equal or lesser amount, then Respondent need
8 provide only that portion of the insurance described above that is not maintained by such
9 contractor or subcontractor.

10 XIII. REIMBURSEMENT OF RESPONSE COSTS

11 80. Respondent shall reimburse EPA, on written demand, for all response costs incurred by
12 the United States in overseeing Respondent's implementation of the requirements of this Order or
13 in performing any response action which Respondent fails to perform in compliance with this
14 Order. Response costs are all costs including, but not limited to, direct and indirect costs and
15 interest, that EPA incurs in overseeing Respondent's implementation of the requirements of this
16 Order, including development of this Order, reviewing or developing plans, reports and other
17 items pursuant to this Order, verifying the Work, or otherwise implementing, overseeing, or
18 enforcing this Order or in performing any response action which Respondent fails to perform in
19 compliance with this Order.

20 81. On a periodic basis, EPA may submit to Respondent bills for response costs that include
21 an itemized Cost Summary.

22
23 82. Respondent shall, within thirty (30) days of receipt of each bill, remit a certified or
24 cashier's check for the amount of those costs. Interest shall accrue from the later of the date that
25 payment of a specified amount is demanded in writing or the date of the expenditure. The interest
26 rate is the rate established by the Department of the Treasury pursuant to 31 U.S.C. § 3717 and 4
27 C.F.R. § 102.13.

1 83. The Respondent shall make payments payable to "EPA Hazardous Substance Superfund"
2 and mail payments to U.S. EPA - Region 9, ATTN: Superfund Accounting, P.O. Box 371099M,
3 Pittsburgh, PA 15251. The payment to EPA may instead be made by Electronic Funds Transfer
4 ("EFT" or "wire transfer") in accordance with instructions provided by the RPM to the
5 Respondent in the first bill for response costs. Any EFT received after 11:00 A.M. (Eastern Time)
6 will be credited on the next business day. The Respondent shall send written notice of the EFT to
7 the RPM. All payments to the United States under this Paragraph shall reference the name and
8 address of the party making payment, the Anaconda/Yerington Copper Mine Site, Site # 09GU
9 and EPA Docket # 2007-0005.

10
11 84. Respondent shall simultaneously transmit a copy of any check to EPA's RPM.

12 85. In the event that the payments for response costs are not made as required above,
13 Respondent shall pay interest on the unpaid balance. Interest is established at the rate specified in
14 Section 107(a) of CERCLA. Interest shall accrue at the rate specified through the date of the
15 payment. Payments of interest made under this Paragraph shall be in addition to such other
16 remedies or sanctions available to the United States by virtue of Respondent's failure to make
17 timely payments under this Section.

18 XIV. UNITED STATES NOT LIABLE

19 86. The United States, by issuance of this Order, assumes no liability for any injuries or
20 damages to persons or property resulting from acts or omissions by Respondent, or its directors,
21 officers, employees, agents, representatives, successors, assigns, contractors, or consultants in
22 carrying out any action or activity pursuant to this Order. Neither EPA nor the United States may
23 be deemed to be a party to any contract entered into by Respondent or their directors, officers,
24 employees, agents, successors, assigns, contractors, or consultants in carrying out any action or
25 activity pursuant to this Order.

26 87. In any agreement that Respondent enters with third parties to undertake the terms of this
27 Order, including any access agreements, Respondent shall save and hold harmless the United

1 States and its officials, agents, employees, contractors, subcontractors, or representatives for or
2 from any and all claims or causes of action or other costs incurred by the United States, including
3 but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on
4 account of acts or omissions of Respondent, its officers, directors, employees, agents, contractors,
5 subcontractors and any persons acting on their behalf or under their control, in carrying out
6 activities pursuant to this Order, including any claims arising from any designation of Respondent
7 as EPA's authorized representatives under Section 104(e) of CERCLA, 40 U.S.C. § 9604(e).

8 XV. ENFORCEMENT AND RESERVATIONS

9
10 88. EPA reserves the right to bring an action against Respondent under Section 107 of
11 CERCLA, 42 U.S.C. § 9607, for recovery of any response costs incurred by the United States and
12 not reimbursed by Respondent. This reservation shall include, but not be limited to, past costs,
13 direct costs, indirect costs, the costs of oversight, and the costs of compiling the cost
14 documentation to support oversight cost demand, as well as accrued interest as provided in
15 Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).

16 89. Notwithstanding any other provision of this Order, at any time during the response action,
17 EPA may perform its own studies, complete the response action, or any portion thereof, as
18 provided in CERCLA and the NCP, and seek reimbursement from Respondent for its costs, or
19 seek any other appropriate relief.

20 90. Nothing in this Order shall preclude EPA from taking any additional enforcement actions,
21 including modification of this Order or issuance of additional orders, and remedial or removal
22 actions as EPA may deem necessary, or from requiring Respondent in the future to perform
23 additional activities pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a), *et seq.*, or any
24 other applicable law. Respondent shall be liable under CERCLA Section 107(a), 42 U.S.C.
25 § 9607(a), for the costs of any such additional actions.

1 91. Notwithstanding any provision of this Order, the United States hereby retains all of its
2 information gathering, inspection and enforcement authorities and rights under CERCLA, RCRA
3 and any other applicable statutes or regulations.

4 92. Respondent shall be subject to civil penalties under Section 106(b) of CERCLA, 42
5 U.S.C. § 9606(b), of not more than \$32,500 for each day that Respondent willfully violates, or
6 fails or refuses to comply with this Order without sufficient cause. In addition, failure to properly
7 provide response actions under this Order, or any portion hereof, without sufficient cause, may
8 result in liability under Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), for punitive
9 damages in an amount at least equal to, and not more than three times the amount of any costs
10 incurred by the Fund as a result of such failure to take proper action.

11 93. Nothing in this Order shall constitute or be construed as a release from any claim, cause of
12 action or demand in law or equity against any person for any liability it may have arising out of or
13 relating in any way to the Site.

14 94. If a court issues an order that invalidates any provision of this Order or finds that
15 Respondent has sufficient cause not to comply with one or more provisions of this Order,
16 Respondent shall remain bound to comply with all provisions of this Order not invalidated by the
17 court's order.

18 XVI. EFFECTIVE DATE AND COMPUTATION OF TIME

19 95. This Order shall be effective ten (10) days after it is signed by the Branch Chief in EPA's
20 Superfund Division. All times for performance of ordered activities shall be calculated from this
21 Effective Date unless otherwise stated.

XVII. OPPORTUNITY TO CONFER

96. Within five (5) days after receipt of this Order, Respondent may request a conference regarding the provisions of this Order. EPA shall deem a failure to request a conference as a waiver of the opportunity to confer prior to the Effective Date.

97. If requested, the conference shall occur prior to the Effective Date provided in Section XVI, unless the Effective Date and conference date are extended by mutual agreement of the Parties, at EPA's Regional Office at 75 Hawthorne Street, San Francisco, California. The conference shall be with EPA's Superfund Division Branch Chief, or whomever the Branch Chief may designate.

98. At any conference held pursuant to this Section, Respondent may appear in person, or be represented by an attorney or other representatives. The purpose and scope of any such conference held pursuant to this Order shall be limited to issues involving the actions required by this Order and the extent to which Respondent intends to comply with this Order. If a conference is held, Respondent may present any evidence, arguments or comments regarding this Order, its applicability, any factual determinations on which the Order is based, the appropriateness of any action that the Respondent is ordered to take, or any other relevant and material issue. Any such evidence, arguments or comments should be reduced to writing and submitted to EPA within three (3) days following the conference. The conference is not an evidentiary hearing, and does not constitute a proceeding to challenge this Order. It does not give Respondent a right to seek review of this Order or to seek resolution of potential liability, and EPA will make no official record of the conference. If Respondent does not request a conference, any evidence, arguments or comments may be submitted in writing within three (3) days following the Effective Date of this Order. Any such writing should be directed to the following address:

J. Andrew Helmlinger
Environmental Protection Agency
75 Hawthorne Street, ORC-3
San Francisco, CA 94105
(415) 972-3904

1 99. Requests for a conference may be made by telephone followed by written confirmation
2 mailed that day to EPA's RPM.

3 XVIII. NOTICE OF COMPLETION OF WORK

4 100. When EPA determines that all Work has been fully performed in accordance with this
5 Order, with the exception of any continuing obligations required by this Order (such as the
6 retention of records), EPA will provide written notice to Respondent. If EPA determines that any
7 such Work has not been completed in accordance with this Order, EPA will notify Respondent,
8 provide a list of the deficiencies, and require that Respondent modify the RI/FS Work Plans as
9 appropriate to correct such deficiencies, in accordance with Paragraph 61. Failure by Respondent
10 to implement the approved modified RI/FS Work Plans shall be a violation of this Order.

11 So Ordered, this 12th day of January 2007.

12 BY:



13 Kathleen Johnson

14 Federal Facilities Branch Chief, Superfund Division

15 U.S. Environmental Protection Agency, Region IX